CLAIM SET AS AMENDED (corrected)

~~[c1]~~ 1. (currently amended) A process for synchronizing an input signal [[(S)]] including the following process steps:

demodulating ~~(5a)~~ the input signal [[(S)]] according to a first demodulation method [[(AM)]] in relation to a first signal parameter for creating a first demodulated input signal ~~(S_{AM})~~;

correlating ~~(6a)~~ the first demodulated input signal ~~(S_{AM})~~ with a first comparison signal ~~(f (AM,Signal))~~ that depends upon the first demodulation method [[(AM)]] to determine a time offset [[(□)]] between the first demodulated input signal ~~(S_{AM})~~ and the first comparison signal ~~(f (AM,Signal))~~; and

time-wise shifting the input signal [[(S)]] in accordance with the time-wise offset [[(□)]] determined by the correlation.

~~[c2]~~ 2. (currently amended) The process ~~Procedure~~ according to claim 1, wherein is further included:

demodulating ~~(5b)~~ the input signal [[(S)]] according to a second demodulation method ~~(FM)~~ in relation to a second signal parameter for creating a second demodulated input signal ~~(S_{FM})~~ and

~~Correlating~~ correlating ~~(6b)~~ the second demodulated input signal ~~(S_{FM})~~ with a second comparison signal ~~(f (FM,Signal))~~ that depends upon the second demodulation method ~~(FM)~~ for determining a time offset between the second demodulated input signal ~~(S_{FM})~~ and

the second comparison signal ~~(f (FM,Signal))~~.

~~[c3]~~ 3. ((currently amended) The process ~~Process~~ according to claim 2, wherein the first demodulation method is amplitude demodulation ~~(AM)~~ and the first signal parameter is the amplitude and the second demodulation method is frequency demodulation ~~(FM)~~ in the second signal parameter is frequency.

~~[c4]~~ 4. (currently amended) The process ~~Process~~ according to claim 1, wherein:

the input signal [[(S)]] is demodulated ~~(5a, 5b, 5c)~~ according to n different demodulating methods ~~(f(x))~~ in relation to n different parameters to create n different demodulated input signals ~~($S_{f(x)}$)~~; and

each demodulated input signal ~~($S_{f(x)}$)~~ is correlated ~~(6a, 6b, 6c)~~ with an associated comparison signal ~~(f (f(x),Signal))~~ dependent on the associated demodulation method ~~(f(x))~~ to determine a time offset ~~($\Box_1$, $\Box_2$, $\Box_3$)~~ between each demodulated input signal ~~($S_{f(x)}$)~~ and the associated comparison signal ~~(f (f(x),Signal))~~.

~~[c5]~~ 5. (currently amended) The process ~~Process~~ according to claim 4, wherein each demodulation method is defined by subjecting the input signal [[(S)]] to one of a definite analytical and partially defined function f ~~(x=S)~~ in order to create the associated

demodulated input signal ~~($S_{f(x)}$)~~.

~~[c6]~~ 6. (currently amended) The process ~~Process as in~~ according to claim 5, wherein at least one of the functions is one of: amplitude demodulation ~~(AM)~~; the logarithm of the amplitude demodulation ~~($\log_n$(AM))~~; frequency demodulation ~~(FM)~~; and the time differential of the frequency demodulation ~~(d/dt(FM))~~.

~~[c7]~~ 7. (currently amended) The process ~~Process~~ according to claim 2, wherein the different results of the correlations ~~(6a, 6b, 6c)~~ of the different demodulation methods are subjected to a weighting [[(8)]], with the correlation results of each demodulation method having a predetermined weighting factor ~~(g_1, g_2, g_3)~~ applied thereto, for calculating the offset [[(□)]] of the input signal [[(S)]].

~~[c8]~~ 8. (currently amended) The process ~~Process~~ according to claim 1, wherein the comparison signal ~~(f (AM,Signal)~~, f ~~(FM,Signal)~~, f ~~(f(x),Signal))~~ is obtained by subjecting a synchronization sequence to the first demodulation method ~~(AM, FM, f(x))~~.

~~[c9]~~ 9. (currently amended) The process ~~Process~~ according to claim 1, wherein the input signal [[(S)]] is subjected to an analog/digital conversion ~~(2; 2a, 2b, 2c)~~ at one of before and

after demodulation ~~(5a, 5b, 5c)~~.

~~[c10]~~ 10. (currently amended) The process ~~Process~~ according to claim 9, wherein a filtering ~~(1; 1a, 1b, 1c)~~ takes place at one of before and after the analog/digital conversion ~~(2; 2a, 2b, 2c)~~.

~~[c11]~~ 11. (currently amended) The process ~~Process~~ according to claim 10, wherein the filtering ~~(1a, 1b, 1c)~~ is different for each demodulation method ~~(AM, FM, f(x))~~.

~~[c12]~~ 12. (currently amended) The process ~~Process~~ according to claim 10, wherein the filtering ~~(1a, 1b, 1c)~~ is carried out so that the one demodulation method ~~(AM, FM, f(x))~~ is converted into another demodulation method ~~(AM, FM, f(x))~~.

~~[c13]~~ 13. (currently amended) The process ~~Process~~ according to claim 9, wherein each result of the correlation ~~(6a, 6b, 6c)~~ is subjected to a first interpolation ~~(7a, 7b, 7c)~~ between sampling points ~~(S_1 — S_5)~~.

~~[c14]~~ 14. (currently amended) The process ~~Process~~ according to claim 13, wherein a first interpolation method used in the first interpolation ~~(7a, 7b, 7c)~~ depends upon one of: an associated demodulation method ~~(AM, FM, f(x))~~; the comparison signal ~~(f~~

~~(AM,Signal)~~, f ~~(FM,Signal)~~, f ~~(f(x) ,Signal))~~; and the filtering ~~(1a, 1b, 1c)~~.

~~[c15]~~ 15. (currently amended) The process ~~Process~~ according to claim 13, wherein the time offset of the input signal is subjected to a second interpolation [[(9)]] between sampling points ~~(S_1 — S_5)~~.